technologies. E-paper displays are called "bistable" because they can maintain an image when the power is turned off. Reflective displays don't require a backlight, as LCDs do, and can be read outdoors. OLEDs emit their own light and use more power than today's active-matrix LCDs but offer faster performance and richer colors. The term "active area" as used herein refers to the active area that can be viewable on the display and is distinguishable from the active area that is sensitive to touch on a touch screen. "Re-sizing the active area" means changing the size or viewing area that is viewable on the display. "Altering" the flexible display from a flat position is meant to indicate modifying the shape of the display by curling, twisting, bending or by other means into a shape that is not flat. "Recognizing that a first end (of the display) has mated with a second end" can mean that the first end can recognize that it is either connected to or within a predetermined distance (via capacitive coupling or otherwise) from a second end of the flexible display. The phrase "Touch sensing" indicates that a display is sensitive to touch by finger, stylus, capacitive coupling or by other means. The term "reconfigurable housing" can mean a housing that can be altered or configured into various positions or shapes and can include housings that flip, twist, fold or generally transform from one shape to another.

[0009] The terms "program," "software application," "resizing program" and the like as used herein, are defined as a sequence of instructions designed for execution on a computer system. A program, computer program, or software application may include a subroutine, a function, a procedure, an object method, an object implementation, an executable application, an applet, a servlet, a source code, an object code, a shared library/dynamic load library and/or other sequence of instructions designed for execution on a computer system.

[0010] Other embodiments, when configured in accordance with the inventive arrangements disclosed herein, can include a system for performing and a machine readable storage for causing a machine to perform the various processes and methods disclosed herein.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. **1** is a perspective view of a flexible display in a flat position in accordance with an embodiment of the present invention.

[0012] FIG. **2** is an illustration of the flexible display of FIG. **1** in a non-flat position in accordance with an embodiment of the present invention.

[0013] FIG. **3** is a block diagram of an electronic device in accordance with an embodiment of the present invention.

[0014] FIG. **4** is flow chart illustrating a method of resizing an active area of a flexible display in accordance with an embodiment of the present invention.

DETAILED DESCRIPTION OF THE DRAWINGS

[0015] While the specification concludes with claims defining the features of embodiments of the invention that are regarded as novel, it is believed that the invention will be better understood from a consideration of the following description in conjunction with the figures, in which like reference numerals are carried forward.

[0016] Embodiments herein can be implemented in a wide variety of ways using a variety of technologies that enable not only the manufacture of flexible displays, but the means of activating an active area for display on the flexible display. For example, OLEDs and e-paper are just some of the technologies that can be used to make flexible display and touch sensing, switch sensing, and even voice recognition can be used to trigger an alteration of the active area for display on the flexible display.

[0017] Referring to FIG. **1**, an electronic product such as a reconfigurable device having a flexible display **100** or just a flexible display **100** is illustrated in a flat position that can include a screen such as a touch sensitive screen **104** and optionally surrounded by a reconfigurable housing or frame **102** that can also be flexible. The shape of the display can be flexibly alterable to accommodate different shapes of the housing **102**. The flexible display **100** can also include a processor or controller coupled to the touch sensitive screen **104** and can be operable to receive signals indicative of the shape of the flexible display and to control an active area of the display dependent upon the shape of the housing. The processor can also re-size the active area of the flexible display dependent on the shape of the display or the housing. The device can also include a sensor generating a signal indicative of the curvature of the display. Curvature detection can be performed in any number of ways including the use of strain gauges. Detection of curvature can also be determined via wire or wireless connection to another device where the resultant curvature of the display is defined by being attached to another other known device or accessory. The processor can also be operable to control the active area of the display such that the active area of the display is proportional to the curvature of the display. The housing can be configurable to a plurality of predetermined orientations (e.g., curved, flat, folded, or any other 3 dimensional shape) and the processor is operable to control the active area of the display to be a predetermined area associated with each configuration. The device can further include a memory (see items **222**, **204**, or **206** in FIG. **3**) for storing respective active areas associated with each configuration and at least one sensor for detecting the housing configuration.

[0018] The controller (or processor) can optionally be programmed to initiate a re-sizing program for re-sizing an active area of the flexible display and re-size the active area of the display when activating at least two points (**103** and **105**) on the flexible display to indicate dimensions of the active area for display. The controller can be further programmed to resize fonts or resize graphic elements or both in correspondence to the dimensions of the active area. As a default, the entire screen **104** can be made visible in the flat position. The controller can initiate the resizing program by altering the flexible display from a flat position as shown in FIG. **1** to a non-flat position as shown in FIG. **2**. The flexible display can further include a switch **106** (such as a Hall Effect switch) that detects the mating of a first end **111** of the flexible display with a second end **112** of the flexible display which initiates the resizing program. The controller can also resize the active area of the flexible display by sensing the activation of at least two points **103** and **105** on the flexible display. The sensing can be done by a touch sensitive display sensitive to touch or to a stylus. As shown in FIG. **2**, the points **103** and **105** can delineate an active area **107** from an inactive display area **108**. Of course, the delineation can be changed based on the selection of the two points. The flexible display can be selectively a wrist-worn device or a hand-held device. Of course, the active area can also be adjusted selectively using commands that can be entered by pressing a keypad, voice command or by other means within contemplation of the embodiment